

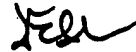
HANADA et al.
Q67358
Preliminary Amendment

REMARKS

The specification has been amended to correct typographical errors. The present amendments are not considered or intended to be a narrowing amendment surrendering any equivalents.

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 16, first full paragraph:

In this case, as the additional layer provided between the above-mentioned ~~formed~~foamed layer and non-foamed layer, the additional layer made of a polyolefin resin selected from the above-mentioned polyolefin having long chain branch and polyolefin having a weight-average molecular weight of 1×10^5 or more, is suitable. By using such a layer as an intermediate layer, a foamed sheet excellent in surface smoothness can be obtained stably, and the surface smoothness of the resulting sheet is also excellent.

Page 28, second full paragraph:

A mixture prepared by blending at a weight ratio of 70/30 of a polypropylene and a polyethylene obtained by a two-stage polymerization method was used as a constituent material of a foamed layer. A method of producing this propylene, a method of ~~palletizing~~pelletizing it, and a method of blending a constituent material of a foamed layer are described below.

Page 33, paragraph bridging pages 33-34:

An apparatus prepared by attaching a 90 mm Φ circular ~~die~~die to a 50 mm Φ twin screw extruder and a 32 mm Φ single screw extruder was used. A mixture prepared by blending 1 part by weight of a core material (trade name: Hydrocerol; manufactured by Baylinger Ingelhyme Chemicals) with 100 parts by weight of a 70/30 (ratio by ~~weigh~~weight) mixture of

polypropylene/polyethylene for a foamed layer was put into the 50 mmΦ twin screw extruder, 1 part by weight of carbon dioxide gas was further injected into this while melt-kneading, to sufficiently knead the resin mixture and a carbon dioxide gas, then, the mixture was fed into a die controlled at 210°C. On the other hand, the above-mentioned dry blended mixture for a non-foamed layer was put into the 32 mmΦ single screw extruder, and melt-kneaded and fed into a die controlled at 210°C. The resin composition for a foamed layer from the 50 mmΦ twin screw extruder and the resin composition for a non-foamed layer from the 32 mmΦ single screw extruder were laminated in a die, then, extruded to give a cylinder, and the extruded cylindrical sheet was expanded, while being cooled, along a mandrel having an outer diameter of 210 mm which was set directly after a die and cooled by circulating water of 6°C through inside. Thus obtained cylindrical two-kind three-layer foamed sheet was cut by a cutter, and opened to give a flat form two-kind three-layer foamed sheet, and stretched by a stretching machine. The physical properties of the resulted foamed sheet were evaluated. The results are shown in Table 1.

Page 44, second full paragraph:

70 parts by weight of a pellet of polypropylene having long chain branch (melting point: 159.0°C; crystallization temperature: 130.1°C; ~~MFR~~ MFR (230°C): 2.2 g/10 min.) and 30 parts by weight of a polyethylene (trade name: Sumikacene G201, manufactured by Sumitomo Chemical Co., Ltd.) were dry-blended to give a mixture which was used.

Page 45, Table 1:

| Item | Example 1 | Example 2 | Example 3 | Com-parative example 1 |
|---|-----------|------------------|-----------|------------------------|
| Amount of recycled polyolefin resin contained in non-foamed | 21 | 34 48 | 21 | 0 |

| | | | | |
|---|-----|-----|-----|-----|
| layer (% by weight) | | | | |
| Thickness of sheet (mm) | 1.2 | 1.2 | 1.2 | 1.2 |
| Thickness of non-foamed surface layer (mm) | 0.1 | 0.1 | 0.1 | 0.1 |
| Thickness of non-foamed layer (mm) (layer other than foamed layer and non-foamed surface layer) | 0 | 0 | 0.1 | 0 |
| Foaming ratio of foamed layer (fold) | 4.5 | 4.5 | 4.5 | 4.5 |
| Ra (μm) | 3.7 | 3.8 | 3.2 | 4.8 |

Page 46, Table 2:

| Item | Example 4 | Example 5 | Example 6 | Com-parative example 12 |
|---|-----------|-----------|-----------|-------------------------|
| Amount of recycled polyolefin resin contained in non-foamed layer (% by weight) | 30 | 48 | 30 | 0 |
| Thickness of sheet (mm) | 1.2 | 1.2 | 1.2 | 1.2 |
| Thickness of non-foamed surface layer (mm) | 0.1 | 0.1 | 0.1 | 0.1 |
| Thickness of non-foamed layer (mm) (layer other than foamed layer and non-foamed surface layer) | 0 | 0 | 0.1 | 0 |
| Foaming ratio of foamed layer (fold) | 4.5 | 4.5 | 4.5 | 4.5 |
| Ra (μm) | 3.7 | 3.8 | 3.2 | 4.8 |